

## **SHELTER REPAIRS and RENOVATION**

### **DESCRIPTION OF WORK**

The contractor is to provide all labor, equipment, and materials to repair Shelter 1 at Henry Horton State Park. The project will consist of repairing the existing structure and preparing the concrete pad for the new shelter components in a one of one replacement.

The contractor is also to remove the shingles from shelters 3 and 4, install synthetic roofing underlayment, install 5 rib metal on the roofs of both shelters and flash the eaves and fascia boards with no wood exposed to the elements.

The contractor is also to provide all labor, equipment, and materials to repair 4 golf shelters. The work consists of removing shingles from all four golf shelters, approximately 14'x14' in size and replace rotten decking, install synthetic roofing underlayment, install 5 rib metal on the roofs and flash the eaves and fascia boards with no wood exposed to the elements. Park staff will replace the sides and paint 6x6 post.

### **SCOPE OF WORK**

#### **Shelter 1**

The contractor shall

1. Remove and properly dispose of the roofing, decking, and support structure. All debris and material from the old structure, the contractor shall consult with facility supervisor or park manager if anything is wished to be kept, otherwise all debris and material shall be removed from State park property.
2. Clean and prep the existing concrete pad for new components. The contractor shall remove the existing decorative concrete pole risers that the existing poles sat upon and smooth down surface and provide and install Simpson Strong tie 6x6 post brackets to secure the 6x6 post to the existing pad. The contractor shall provide and install 4, 3/8 x 4-inch tap cons to attach the post brackets to the existing concrete structure.
3. The contractor shall place the new support posts on 8-foot centers around the outside perimeter of existing concrete pad. The contractor shall install two 2"x6" pine lumber outside bands around the perimeter of the 8-foot 6"x6" post to serve as the top plate for the rafters to attach and serve as bracing and making sure to provide and install 41 0x4" decking screws to attach the 2"x6" lumber bands to the tops of the 6"x6" post.
4. The contractor shall provide and install 2"x8" pine lumber every eight foot to serve as roof joist for the purlin bracing to attach to. The contractor shall install corner bracing and bracing to each of the 6x6 post to serve as bracing for the outer band.
5. The contractor shall provide and install 2"x8" pine lumber to construct the rafters and make sure the roof has a 4:12 pitch. The contractor shall place the rafters on 2-foot centers. The contractor shall provide and install 2x8 pine lumber to serve as the ridge board. The contractor shall make the rafters approximately 14 feet long and provide

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and install 2x8 pine lumber. The contractor shall make sure that they have approximately 16" of overhang on eaves of the perimeter of the structure to form a false rafter.

6. The contractor shall provide and install 2x6 pine lumber to install collar beams at the top portions of every other rafter or every 8 foot. The contractor shall then follow by adding 3 purlin bracings made from 2x6 pine lumber and install them on every other rafter or every 8 feet.
7. At each purlin bracing, there shall be one installed on the ridge board, and one each on left and right sides approximately four feet from the ridge board. Each outer purlin bracing shall meet at the centers of the center purlin bracing.
8. The contractor shall have approximately 18" of overhang on the sides of the structure. The contractor shall then provide and install 1x6 pressure treated lumber to provide and install as fascia boards to cover the ends of the rafters.
9. The contractor shall provide and install 2x6 tung and grooved standard pressure treated lumber as decking to serve as the roof for the structure. Contractor shall make sure to mismatch the decking as it is attached to the rafters. The contractor shall provide and install 3" decking screws to attach the decking to the rafters.
10. The contractor shall provide and install synthetic underlayment atop of the decking before applying the metal roofing and provide and install staples to attach the material to the decking.
11. The contractor shall provide and install park brown colored 5-rib hi metal, mac metal roofing or equal with a 25-year warranty and shall provide and install 1 ½" metal roofing screws with neoprene washers to attach the metal to the structure while making sure the screws do not penetrate the decking and show from within the shelter. The contractor shall provide and install park brown colored smooth aluminum fascia trim, to cover the replacement 1x6 fascia boards.

### **Electrical Requirements for Shelter 1**

1. The contractor shall provide and install a new Square D Homeline 125 Amp 4-Space 8-Circuit Outdoor Main Lug Load Center with Ground Bar Model #HOM48L125GRB, or ABB MLO 125amp 4-Circuit 1P3W 120/240 3R Catalog #TL412R2 UPC 783164305272, or Equivalent.
2. The contractor shall provide and install ¾" metal conduit with three 12 AWG copper stranded wire, in white, black, and green designated colors for each circuit on the structure leading to either lights or plug ins.
3. The contractor shall install 4 Lithonia Lighting 4297-Lumen Bronze Integrated LED Canopy Light Item #1029627 Model #OFMLEDP1S0KMVOLTDDDB or Sunlite 100-Watt Equivalent Integrated LED Square Bronze Dimmable 4600 Lumens Outdoor Wet Location Canopy Light Fixture, S000K Model# HD03158-1 or equivalent. The

contractor shall install one 20-amp single pole single throw switch to allow guest to power lights on and off. The contractor shall also install two outdoor style covered 120-volt outlets in the middle of the structure on each side of the building mounted to the inside of the 6x6 post.

### **Shelter 3 & 4**

The contractor shall remove the existing shingles from the roof and is responsible for their disposal off state park property. The contractor shall then install synthetic underlayment roofing material to the exposed decking and park brown colored 5 rib hi metal, mac metal roofing or equal with a 25-year warranty and shall provide and install 1 1/2" metal roofing screws with neoprene washers to attach the metal to the structure. The contractor shall provide and install park brown colored metal flashing to cover the eaves, and facia boards making sure to leave no wood exposed to the elements. The contractor shall also provide and install metal flashing around the chimneys of each shelter.

### **Golf Shelters – (4)**

1. Remove any rotten bands on each of the structures and repair with pressure treated like lumber. Remove any rotten 2x6 band bracing and repair with pressure treated like material.
2. Remove rotten 1x4 facia boards and repair with pressure treated like material.
3. Remove the old 6x6 post and replace with new pressure treated 6x6 post. The contractor shall use the existing metal mounts to mount the new post to the concrete pad. The contractor shall provide and install 10x4" decking screws to secure the post to the mounts and to the roof.
4. Remove the existing shingles from the roof and contractor is responsible for their disposal off state park property.
5. Remove and repair any rotten decking with treated like materials and use 2" decking screws to attach decking to rafters. Approximate square footage of each shelter is 196 square feet.
6. The contractor shall provide and install synthetic underlayment atop of the decking before applying the metal roofing and provide and install staples to attach the material to the decking.
7. The contractor shall provide and install 5-rib hi metal, mac metal roofing or equal with a 25-year warranty and shall provide and install 1 1/2" metal roofing screws with neoprene washers to attach the metal to the structure while making sure the screws do not penetrate the decking and show from within the shelter. The contractor shall provide and install smooth aluminum fascia trim, to cover the replacement 1x4 facia boards. The Park will pick the color at site visit.

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**CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEASUREMENTS.**

Contractor shall be responsible to repair or replace all damages to state property during this job. The contractor is responsible for consulting with the Regional Maintenance Office to discuss working hours.

**Contractor shall dispose of all trash and debris off of state property.**

Contractor's warranty will begin on the date of final inspection and acceptance of work by the state of Tennessee.

Work is to be begin within 10 days after receipt of purchase order and completed within 30 days.